

# ATR 72-500

## FlightGear Flight Simulator

### General aircraft information

The ATR 72-500, officially known as the ATR 72-212A, is a two-engine turboprop airliner manufactured by the French-Italian company ATR. It is a larger and more powerful derivative of the ATR 42. The ATR 72 can be ordered in passenger and freighter configurations.



### General specifications:

- |                    |                                 |
|--------------------|---------------------------------|
| ◆ Length:          | 89 ft, 2 in                     |
| ◆ Height:          | 25 ft, 1 in                     |
| ◆ Wing span:       | 88 ft, 9 in                     |
| ◆ Capacity:        | 68 – 74 passengers / 16,645 lbs |
| ◆ Service ceiling: | 25,000 ft                       |
| ◆ Range:           | 715 nmi                         |
| ◆ Cruise speed:    | 276 KTAS                        |
| ◆ MTOW:            | 49,604 lbs                      |

- ◆ Empty weight: 28,550 lbs
- ◆ Takeoff run (MTOW): 3,822 ft
- ◆ Engine power: 2,475 SHP x2

The ATR 72-500 for FlightGear was started on January 4, 2011. It features a YASim FDM, cockpit, interior, advanced autopilot, and various other features.

## Starting up

When you load up your ATR 72 in FlightGear, you'll find yourself in a cold and dark cockpit. To start up the engines, you can use the “autostart” function, which will start up the aircraft for you. Access it under the menubar.

You can also start the engines manually. An interactive tutorial is included and can be found in Help > Start Tutorial.

Here's the procedure for quick reference:

1. Condition levers **MAX RPM**
2. Engine start switch **CRANK A&B**
3. Engine 1 starter **ON** (button or hold s)
4. Engine 2 starter **ON** (button or hold s)
5. Engine start switch **OFF**
6. DC generator 1 **ON**
7. DC generator 2 **ON**

## Steering with the tiller

One of the unique features of the ATR 72 is the tiller steering system, inspired by a similar system on the Boeing 777-200. In reality, the ATR 72 cannot be steered on the ground using the rudder. A tiller in the cockpit is used instead. In FlightGear, this is simulated using a dialog accessed from the menubar.



Un-checking “Enable tiller steering” will disable the tiller and allow you to steer the nose gear using the rudder. (This option exists solely for your convenience within the simulator.) Clicking the center button will move the tiller back to the center.

The tiller can also be controlled using the following keyboard shortcuts:

Q	sets tiller to full left
q	steers tiller toward the left
w	centers tiller
e	steers tiller toward the right
E	sets tiller to full right
W	opens the tiller steering dialog

## Hints and tips

- ◆ The ATR 72 has no APU, so electrical power is not available when the engines are not running if neither the battery nor external power are turned on. However, engine 2 can be run in “hotel mode.” Start up engine 2 normally, and turn on the propeller brake (the control can be found on the overhead panel) and DC generator 2. Engine 2 will be running, providing electrical power, but the propeller will not spin.
- ◆ The ATR's autopilot may be confusing at first. Have a look over *README.autopilot.pdf* if you need any help.
- ◆ You can open the two doors in the back and the cargo door by clicking on them. Several other objects in the interior are also interactive. Press Ctrl-C to highlight them.